



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : F. KNAUSEDER

Confirmation No. 2541

Appln No. : 09/814,066

Group Art Unit: 3673

Filed : June 21, 2001

Examiner: M. Safavi

For : FLOORING PANELS

REQUEST FOR PRE-APPEAL BRIEF REVIEW

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Window, Mail Stop AE
Randolph Building
401 Dulany Street
Alexandria, VA 22314
Sir:

This request is being filed concurrently with a Notice of Appeal and is responsive to the Final Official Action of September 22, 2005.

Reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejections is respectfully requested in view of the following remarks.

A prima facie case of unpatentability has not been set forth and the Rejections Under 35 U.S.C. § 103(a) of Claims 1-3, 21-25 and 31-36 Are Improper

Independent claim 1 recites a configuration for combining flat structural components which utilizes the combination of a tongue and groove connection wherein both the tongue and groove have divergent sides and integrated locking mechanisms and which also includes a pre-applied adhesive layer or a pre-applied layer of a substance which activates adhesive is applied off-site and is present on the groove at least in the area of its divergent sides or on the tongue at least in the area of its divergent wedge-shaped area, or on both areas.

Independent claim 31 similarly recites the combination of a tongue and groove connection wherein both the tongue and groove have divergent sides and locking elements and also includes a pre-applied adhesive layer or pre-applied substance which activates an adhesive applied off-site and being present on the groove at least in

the area of the divergent sides or on the tongue at least in the area of the divergent wedge-shaped area, or on both areas.

Finally, independent claim 34 similarly recites the combination of a tongue and groove connection wherein both the tongue and groove have divergent sides and locking elements and additionally includes a pre-applied first layer arranged on at least one surface of the groove at least in an area of the divergent sides and a pre-applied second layer arranged on at least one surface of the tongue at least in an area of the divergent wedge shape, wherein each of the pre-applied first and second layers comprises an adhesive layer or a pre-applied layer of a substance which activates an adhesive.

Examiner's Assertion

The Examiner acknowledges that AT '560 lacks the recited adhesive between the tongue and groove joints, but explains that DE '962 teaches the use of a contact adhesive in a tongue and groove joint to establish a secure engagement between the panels (see page 3 of Final Office Action). The Examiner further asserts that each of SCARLETT, KELLER and TURNER disclose the "application of an adhesive upon or within a locking joint between structural members" and, as a result of these teachings, that it would have been obvious "[t]o have provided the floor tile assembly of [AT '560] with adhesive between and within the tongue and groove joints." Finally, the Examiner cites ROESCH for its disclosure of a two-component adhesive.

Applicant's Response

Applicant respectfully disagrees that the asserted combination of these documents discloses or suggests the combination of features recited in at least claims 1, 31 and 34.

Applicant does not dispute that DE '962 teaches a tongue and groove connection between panels as well as the factory application of glue to adjoining areas, and that AT '560 teaches a tongue and groove with locking mechanisms. However, the Examiner has failed to appreciate that the factory application of an adhesive is not a *per se* disclosure of a pre-applied adhesive or pre-applied substance because, as will be explained below, a pre-applied adhesive or substance is a type of adhesive or substance that is simply not disclosed or suggested by the applied documents. The Examiner has also ignored the noted deficiencies of these documents. For example,

AT '560 does not teach the use of any adhesive in a locking tongue and groove joint. Moreover, DE '962 merely discloses a contact glue which requires that the mating surfaces "be pressed together with a considerable degree of pressure, making it impossible to additionally adjust the glued joint in the longitudinal direction for the purpose of closing a transverse joint." Thus, even if these documents were properly combinable (which Applicant disputes) they would nevertheless not disclose or suggest the unique combination of three features in the connection of flat structural panels: that is, (1) a tongue and groove connection with divergent sides; (2) that both the tongue and the groove have a locking mechanisms or elements; and (3) that either the tongue, or the groove, or both of these devices, have a pre-applied adhesive or an adhesive substance as defined above.

Applicant emphasizes that the application of the adhesive or the substance at least to corresponding divergent surfaces of the tongue and groove and connecting the tongue and groove, causes the tongue becomes bonded to the groove by virtue of the divergent surfaces being pushed and remaining in tension. This ensures an especially reliable bonding of the connection. Furthermore, because of the substance placement and the use of the locking elements, the arrangement is such that locking elements help ensure that the substance on the divergent sides cannot come up and out of the connection onto the surface of the panels. Thus, the locking elements act as a locking device and as a device which prevents the spilling out of the adhesive substance. The pre-application of the adhesive or substance at least on the divergent sides also ensures it does not find its way into the locking elements – thereby ensuring a totally flat surface in the area of the connection of the panels.

Nor would any proper combination of these documents recognize the numerous benefits noted above and even achieve an automatically secure connection between flat structural panels. For example, the paragraph bridging pages 4 and 5 of the instant specification specifically explains the benefits of this connection as, among other things, reducing the amount of "maneuvers and manual stages involved in laying out the panels on site". Other noted benefits of pre-applying the substance include: (i) ensuring that a sufficient but not excessive amount of adhesive is used in the connection, (ii) eliminating the problem of glue setting during installation, (iii) providing a seamless joint, and (iv) eliminating the possibility of a welling out of the substance which typically

occurs when a glue is applied on site and which can form spots on the surface that must be removed immediately.

Applicant also disputes the relevancy of each of SCARLETT, KELLER, TURNER, or ROESCH, as these documents are completely silent with regard to a pre-applied adhesive layer or activator substance. SCARLETT, for example, discloses the use of an adhesive joint between different portions of a structural beam. While this document discloses the use of a locking joint which is secured with adhesive, the Examiner has failed to appreciate that SCARLETT does not disclose the use of a pre-applied adhesive. SCARLETT, instead teaches using an adhesive which is applied at the time of assembly and which has the problem of a welling of adhesive during the closing of the joint (see col. 6, lines 24-28). KELLER similarly discloses the use of an adhesive joint between different portions of a structural beam. While this document also discloses the use of a locking joint which is secured with adhesive, the Examiner has failed to appreciate that KELLER does not disclose the use of a pre-applied adhesive. KELLER, instead merely teaches coating the tongue and groove prior to their being joined with "a suitable adhesive" (see col. 2, lines 53-55). TURNER merely discloses the use of an adhesive joint between wood members. While this document also discloses the use of a locking joint which is secured with adhesive, the Examiner has failed to appreciate that TURNER does not disclose the use of a pre-applied adhesive. TURNER, instead merely teaches applying "a suitable adhesive ... to both the abutment surfaces and the pieces of machined timber slidably engaged. " (see col. 4, lines 64-67). Finally, ROESCH is non-analogous art. Whereas the invention relates to flat structural components or panels using a tongue and groove locking connection having a pre-applied adhesive or adhesive activator, ROESCH relates to a connection between plastic pipe parts which can be pre-applied with an adhesive (see Fig. 3).

Examiner's Assertion

In the Advisory Action, the Examiner essentially explains that the term "pre-applied adhesive" does not distinguish the claims over the applied documents because this term relates to when an adhesive is applied and not to the type of adhesive.

Applicant's Response

Applicant respectfully disagrees. As explained in the Rule 1.116 Response, pre-applied adhesives or pre-applied adhesive activator substances are terms of art whose

meaning is well known to those having ordinary skill in the art of adhesives. Such features are clearly structural and cannot properly be argued to be non-limiting method limitations. Again, Applicant refers the Examiner to U.S. Patent No. 4,417,028 to AZEVDO (a copy of which was attached to the Rule 1.116 Response) which contains an accurate description of such substances. Such substances are typically stable compositions which are prepared and pre-applied to "surfaces prior to the time of assembly, which will remain on the parts during normal storage and shipment, and which will cure upon mating with another part thereby imparting an effective and improved seal or bond." (see col. 1, lines 56-68 of AZEVDO). Such substance also typically ensure that the pre-applied parts "can then be shipped or stored for substantial periods of time prior to cure" and are "dry to the touch. Finally, such substances may also have the attribute that "when crushed or ground by a mating surface, cures to a strong bond" (see col. 2, lines 1-22 of AZEVDO). Indeed, these properties, as well as other properties, are specifically acknowledged and noted on pages 5-14 of the instant specification in discussing examples of the types of substances which can be utilized in the invention.

Accordingly, it is submitted that the cited combination of references does not render obvious independent claims 1, 31 and 34, or the claims that depend from them. Therefore, Applicant respectfully requests that the rejection be withdrawn.

CONCLUSION

Reconsideration of the Final Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,
F. KNAUSEDER

A handwritten signature in black ink, appearing to read "Andrew M. Calderon", with a large, stylized flourish extending from the end of the signature.

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December 22, 2005
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